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Title

"The Challenge of Re-engineering in the fabrication o flight electronics"

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As we adopt and implement the doctrines of re-engineering, we at NASA/JPL are asked to make a giant leap in how we think of and design spacecraft. We call what we are doing a revolution, since we are not "evolving" to the next step in our activity, but literally leaping beyond it. This is fully in concert with the concepts of re-engineering, in that areas that need to be changed are indeed literally invented anew.

To be successful, JPL and its industry partners, must perfect processes, techniques and methods that work at all levels of the spacecraft development cycle. If all other parts of the discipline have moved on and changed, but a key portion remains locked in the time warp of yesterday, we will not be able to reach our desired goal.

At the present time change is occurring all over JPL, and it is our intent to discuss how it applies to areas where prototype, or one of a kind hardware are fabricated, and how these areas might look when new approaches to doing business are applied.

Since all activities in an organization must attain similar levels of expertise or be in danger of hampering the entire process, the issues of Packaging Engineering, Manufactureability, and fabrication become key items.

Carl de Silveira is the Deputy Manager of the Electronic Equipment Engineering and Fabrication Section at JPL. He has been in the business of electronics design and fabrication for over twenty), fire years. He has a Bachelors Degree in Electrical Engineering from UC 10S Angeles and a Masters in Business Administration from Pepperdine University.